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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,410	11/04/2004	Oscar Bravo	1515-1048	9553
465 7590 05/14/2008 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER HUQ, FARZANA B	
			ART UNIT 2155	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/501,410

Applicant(s)

BRAVO ET AL.

Examiner

FARZANA HUQ

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/US)
Paper No(s)/Mail Date 09/13/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is response to the amendment filed on February 22, 2008. Claims 5 and 6 are amended. Claim 18 is newly added. The examiner withdraws the objection regarding claim 5 and 6 in response to corrections made by applicant.

Claims 1-18 are pending in this office action.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

2. Claim 18 is rejected under 35 U.S.C. 101 because the claim invention is directed to non-statutory subject matter. According to the specification of the invention "a processor

programmed with software” is reasonably interpreted by one of ordinary skill as just software, it is a system of software, per se, and fails to associate with any tangible result. In this claim the function of the program is just software not any hardware. Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure’s functionality to be realized. Similarly, computer readable medium claimed as computer instructions per se, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program’s functionality to be realized. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions. So, it does not appear that a claim reciting a processor programmed with software with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

3. Claim 18 is further rejected under 35 U.S.C. 101 because the claim invention is directed to non-statutory subject matter. The claim limitation comprises a method claim within a system claim. The claim must fall into same category of statutory. Claims first portion is directed towards system, and rest or the bottom portion is directed towards method. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Response to Arguments

4. Applicant's arguments with respect to claims 1-18 have been fully considered but they are not persuasive.
5. Applicant argues that Hearn and fails to disclose the features of Applicant's claim 1 where, "a control system in a system comprising a plurality of service providers and a plurality of network providers, which control system enables any service provider to order a product at any network provider and enables the network provider to manage information for delivering said product in a telecommunication network to the service provider, wherein the control system comprises: means arranged to register a product type order, from a service provider, at a network provider."

The examiner respectfully disagrees.

MPEP states in chapter 707, that the recitation above has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Therefore, applicant's main argument that lack of teachings of plurality of service providers and network providers in Hearn's reference should not to be addressed because it is just part of preamble only, not in the body of the claim. Applicant raises the confusion between the preamble and body of the claim. In the preamble, applicant claims plurality of service

providers and plurality network providers. On the contrary, body of the claim which actually has the patentable weight claims a service provider and a network provider. Thus, it is conflicting to each other. “A service provider” and “a network provider” has the universal meaning. Applicant can not just make his own laxiography by using any well known terminology. As well known concept, “a service provider” is the one which provides the service and “a network provider” is the one which manages the network. In network technology field, an ordinary skilled in the art obviously interprets the claim limitation “means for arranged to register a product type order, from a service provider, at a network provider” is simply some arrangement to register a product type order from service provider to a network provider. It is evident that in page 11, and 12 of latest remark, applicant misinterprets the claim language “plurality of service providers” and “plurality of network providers”. Applicants wrong interpretation of his own claim language should not be considered to evaluate the used prior arts. Hearn distinctly describes the definition of the service provider and network provider at the beginning of his invention, “the domain for managing customer...and to transmit a request for the provision of a new service...a service management system...(col. 1, lines 50-67)” which defines a service provider, then “a domain for performing the network management operation (which includes element manager) (col. 1, line 48)” defines a network provider. Hearn teaches that a service management system (service provider) sends the new service request (product type order) to the network element manager (network provider) (col. 3, lines 22-45). Thus, Hearn successfully discloses the claimed limitation that service provider sends a product type order to network provider.

As per specification of the current application there is an interface between the service provider and network provider (specification paragraph, 0012). Thus, the service provider and

network provider is the part of a larger control system. Applicant also adds "...for a network provider to manage information for providing network services in a telecommunication network according to claim 1 (specification, paragraph, 0013)". Hearn discloses the same kind of criteria of large system wherein some domain acts a service provider to provide the service and other domain's role is to provide the network service after get instruction from service provider. These individual domains are part of a large service providing system wherein each of them are connected with interface just like applicant control system (col. 2, lines 1-13, col. 7, lines 63-67, col. 8, lines, 1-9). So, examiner believes that these individual domains disclose the requirement of claimed "a service provider" and "a network provider". Examiner suggests for best understanding of Hearn's teachings of how to disclose the service provider sends the service request to the network provider is described in figure 12, component S11, and S12. Hearn also teaches the new service order which comes to the server management system (col. 10, lines 31-43). It is already shown in the aforementioned lines that how this order transfers to network management system.

6. Applicant argues that Orshan does not disclose, "translate the communication protocols that the service provider is using to the communication protocols of the network technology of the network provider". Examiner respectfully traverses the arguments. In deed, Orshan discloses the service provider's (DSLAM) communication protocol transformed to a standard network protocol and then forward it to the inter service provider (ISP) (paragraph, 0034). So, Orshan clearly discloses that service provider protocol translates to a standard protocol which should be recognizable by network provider and thus discloses this part of the claim limitation.

In response to applicant's argument that it is not obvious to combine these two references, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Examiner shows why these two inventions are analogous and obvious to combine for rejection purposes. So, after carefully reviewing both the references, examiner traverses all the argument presented by applicants and sustains the previous rejection to reject all the claims.

7. Applicant's arguments with respect to claim 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hearn et al. hereinafter Hearn (U.S. Patent 5640505), in view of David Orshan hereinafter Orshan (Publication no. 20020152326).

9. As per claim 1, Hearn discloses a system comprising a plurality of service providers and a plurality of network providers, which control system enables any service provider to order a product at any network provider and enables the network provider to manage information for delivering said product in a telecommunication network to the service provider (abstract), wherein the control system comprises: means arranged to register a product type order, from a service provider, at a network provider (abstract, col. 1 lines 24 – col. 2 lines 13, col. 3 lines 23-45); means arranged to identify the network technology of the network provider for the ordered product type, based on predetermined registered network technology information (col. 1 lines 24-67, col. 7 lines 9-29 and lines 63 – col. 8 line 7); means arranged to create and register an order based on said product type order from the service provider (col. 7 lines 5-9 and line 63 – col. 8 line 7, col. 9 lines 39-55); means arranged to have communication protocols that the service provider is using to the communication protocols of the network technology of the network provider, which is based on said predetermined registered network technology information (col. 1 lines 55-66, col. 3 lines 16-45, col. 7 lines 63 – col. 8 line 7); and means arranged to deliver said product, in accordance with the registered order, to the service provider (col. 1 lines 14-16 and 50-66, col. 3 lines 30-45, col. 10 lines 32-49), but he does not explicitly disclose translation of communication protocols which the service provider is using to the communication protocol of the network provider. However, in the same field of endeavor Orshan discloses translate the

communication protocols that the service provider is using to the communication protocols of the network technology of the network provider (paragraphs [0021, 0034]).

Accordingly, it would been obvious to one of ordinary skill in the computer networking art at the time of invention was made to have incorporated Orshan's teaching of System, method, and computer program product for facilitating local internet service providers to deliver guaranteed bandwidth inter service with the teachings of Hearn, for the purpose of suitably teaching protocols of both service and network providers are translated to be compatible for delivery of ordered product (pages 1-4).

10. As per claim 2, Hearn discloses system wherein is arranged to coordinate a plurality of network technologies simultaneously, based on the predetermined registered network information (col. 1 lines 55-66, col. 3 lines 16-45, col. 7 lines 63 – col. 8 line 7, col. 11 lines 53-64), but he does not disclose translating the protocol of the service provider to the protocol of these different network technologies. Exemplary of this is Orshan, discloses translating the protocol of the service provider to the protocol of these different network technologies (paragraphs [0021, 0034]).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 2.

11. As per claim 3, Hearn discloses system is arranged to register and manage data associated with every product during the lifetime of the product (abstract, col. 1 lines 24 – col. 2 line 13, col. 3 lines 23-45, as long as user or client is registered for the product).

12. As per claim 4, Hearn discloses system is arranged to register data associated with installed network resources (col. 1 lines 24 – col. 2 line 13, col. 9 lines 52-59, col. 11 lines 53-64, col. 12 lines 25-39).

13. As per claim 5, Hearn discloses system is arranged to monitor status about, book, connect and release said installed network resources, based on said registered data associated with the installed network resources (col. 10 lines 31-53, col. 11 lines 53-64).

14. As per claim 6, Hearn discloses is arranged to adapt the communication protocols that the service provider is using, to network elements included in the network technology, which network elements can have different versions, different manufacturers, be of different types and have different technical solutions, based on said predetermined registered network technology information (col. 1 lines 55-67, col. 3 lines 23-45, col. 4 lines 28-50).

15. As per claim 7, Hearn discloses means arranged to deliver said product, in accordance with the registered order, to the service provider, is arranged to change or cancel the delivery of said product (col. 6 lines 1-23, col. 7 lines 9-29, col. 10 lines 26-30, col. 12 lines 36-40).

16. As per claim 8, Hearn discloses is arranged to define a given product by means of forming the product using at least one predetermined registered data set (col. 10 lines 31-43, col. 11 lines 53-64, col. 12 lines 36-40).

17. As per claim 9, Hearn discloses a system a plurality of service providers and a plurality of network providers, which method enables any service provider to order a product at any network provider and enables the network provider to manage information for delivering said product in a telecommunication network to the service provider (abstract), wherein the method comprises the steps of: registering a product type order from a service provider, at the network

provider (abstract, col. 1 lines 24 – col. 2 lines 13, col. 3 lines 23-45); identifying the network technology of the network provider for the ordered product type, based on predetermined registered network technology information (col. 1 lines 24-67, col. 7 lines 9-29 and lines 63 – col. 8 line 7); creating and registering an order based on said product type order from the service provider (col. 7 lines 5-9 and line 63 – col. 8 line 7, col. 9 lines 39-55); the communication protocols that the service provider is using, to the communication protocols of the network technology of the network provider, based on said predetermined registered network technology information (col. 1 lines 55-66, col. 3 lines 16-45, col. 7 lines 63 – col. 8 line 7); and delivering said product, in accordance with the registered order, to the service provider (col. 1 lines 14-16 and 50-66, col. 3 lines 30-45, col. 10 lines 32-49), but he does not explicitly disclose translating communication protocols which the service provider is using to the communication protocol of the network provider. However, in the same field of endeavor Orshan discloses translating the communication protocols that the service provider is using to the communication protocols of the network technology of the network provider (paragraphs [0021, 0034]).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 9.

18. As per claim 10, Hearn discloses a system comprising the step of: coordinating a plurality of network technologies simultaneously, based on the predetermined registered network information (col. 1 lines 55-66, col. 3 lines 16-45, col. 7 lines 63 – col. 8 line 7, col. 11 lines 53-64), but he does not disclose translating the protocol of the service provider to the protocol of these different network technologies. In the same field of endeavor, Orshan discloses translating

the protocol of the service provider to the protocol of these different network technologies (paragraphs [0021, 0034]).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 10.

19. As per claim 11, Hearn discloses a system registering and managing data associated with every product during the lifetime of the product (abstract, col. 1 lines 24 – col. 2 line 13, col. 3 lines 23-45, as long as user or client is registered for the product).

20. As per claim 12, Hearn discloses a system registering data associated with installed network resources (col. 1 lines 24 – col. 2 line 13, col. 9 lines 52-59, col. 11 lines 53-64, col. 12 lines 25-39).

21. As per claim 13, Hearn discloses a system monitoring status about, book, connect and release said installed network resources, based on said registered data associated with the installed network resources (col. 10 lines 31-53, col. 11 lines 53-64).

22. As per claim 14, Hearn discloses a system adapting the communication protocols that the service provider is using, to network elements included in the network technology, which network elements can have different versions, different manufacturers, be of different types and have different technical solutions, based on said predetermined registered network technology information (col. 1 lines 55-67, col. 3 lines 23-45, col. 4 lines 28-50).

23. As per claim 15, Hearn discloses a system wherein the delivery of a product, in accordance with the registered order, to the service provider, can be changed or cancelled (col. 6 lines 1-23, col. 7 lines 9-29, col. 10 lines 26-30, col. 12 lines 36-40).

24. As per claim 16, Hearn discloses a system wherein a given product is defined by means of forming the product using at least one predetermined registered data set (col. 10 lines 31-43, col. 11 lines 53-64, col. 12 lines 36-40).

25. As per claim 17, Hearn discloses a computer-readable medium storing computer-executable components for unit to perform the computer-executable components are run on microprocessor included by the unit (col. 1 lines 33-45, col. 6 lines 33-41, col. 16 lines 45-64).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koji Nishi hereinafter Nishi (U.S. Publication 2001/0027484), in view of David Orshan hereinafter Orshan (Publication no. 20020152326).

26. As per claim 18, Nishi discloses a control system comprising: a plurality of service providers (figure 1, paragraphs [0013, 0014, 0033, 0039]); a plurality of network providers (figure 1, paragraphs [0013, 0014, 0033]) a processor programmed with software that enables any service provider of a plurality of service providers to order a product at any network provider of the plurality of network providers and enables a network provider of the plurality of network providers to manage information for delivering said product in a telecommunication network to the service provider of the plurality of service providers by performing the method of: registering a product type order from the service provider, at the network provider (paragraphs [0015, 0033, 0034]); identifying the network technology of the network provider for the ordered product type, based on predetermined registered network technology information (paragraphs [0033-0038, 0057]); creating and registering an order based on said product type order from the service provider (0013-0015, 0057, 0059); based on said predetermined registered network technology

information; delivering said product, in accordance with the registered order, to the service provider (0031-0038, 0046, 0047). Although Nishi discloses both providers should also meet the required communication quality standards and configurations for the services (paragraphs [0057, 0059, 0066]), he does not explicitly disclose translation of communication protocols which the service provider is using to the communication protocol of the network provider. However, in the same field of endeavor Orshan discloses translate the communication protocols that the service provider is using to the communication protocols of the network technology of the network provider (paragraphs [0021, 0034]).

Accordingly, it would be obvious to one of ordinary skill in the computer networking art at the time of invention was made to have incorporated Orshan's teaching of System, method, and computer program product for facilitating local internet service providers to deliver guaranteed bandwidth inter service with the teachings of Nishi, for the purpose of suitably teaching protocols of both service and network providers are translated to be compatible for delivery of ordered product (pages 1-4).

Conclusion

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARZANA HUQ whose telephone number is (571)270-3223. The examiner can normally be reached on Monday - Friday: 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Farzana Huq/
Examiner, Art Unit 2155

/saleh najjar/
Supervisory Patent Examiner, Art Unit 2155